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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,393	04/15/2004	Masaaki Yamaya	0171-1084PUS1	6404
2292	7590	09/07/2006		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
			EXAMINER	
			MOORE, MARGARET G	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,393

Applicant(s)

YAMAYA ET AL.

Examiner

Margaret G. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 to 19 is/are pending in the application.
- 4a) Of the above claim(s) 10 to 15, 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 to 9, 16, 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's election with traverse of Group I in the reply filed on 6/14/06 is acknowledged. The traversal is on the ground that it would not be unduly burdensome on the Examiner to examine all of the claimed inventions together. This is not found persuasive because the search for Group II is not required for Group I. Note for instance that the presence of the layer having a higher refractive index is not required in the claims currently under examination.

The requirement is still deemed proper and is therefore made FINAL.

2. This application contains claims 10 to 15, 18 and 19 drawn to an invention nonelected with traverse in the paper dated 6/14/06. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

3. Applicants' amendment filed 6/14/06 overcomes the previous prior art rejections as noted in their response. However, upon consideration of the newly amended claims, the following new ground of rejection is made.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 to 9, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 1-275130 (improperly referred to as JP 1-272130 in the IDS filed 9/7/05).

The Examiner has requested an English language translation of this document and had hoped it would be available by the time the examiner had to respond to the amendment filed 6/14/06. Unfortunately the translation has not been received. As such this rejection relies on the Japanese language document and that which can be

discerned therefrom. The Examiner will forward a copy of the translation to applicants once it is available.

As can be seen from the abstract, JP 1-275130 teaches a coating composition that contains a combination of a disilane A, which meets the disilane (A) in claim 3, and a silane (B). Particular attention is drawn to silane B-I found in the working examples which meets silane (B) in claim 3. The working examples show various compositions that contain a cohydrolyzate of (A) and (B). See Tables 2 and 4.

While it does not appear that any of the examples use the disilane in an amount of 95 wt% to 99.5 wt%, the Examiner draws attention to the teachings on the left hand column of page 6 which indicates that (A) and (B) can be present in an amount of from 1 to 99 wt%. Particularly in view of the specifically delineated upper limit of 99 wt% disilane, the skilled artisan would have found the presence of 99 wt% disilane in a composition having (A) and (B) as claimed to have been obvious. For instance, in Example 10 and 11 found in Table 2, which contain about 88 wt% disilane, the skilled artisan would have found the presence of 99 wt% disilane to have been obvious in view of the fact that this is specifically taught as an upper limit.

With regard to the filler, see the first full paragraph on the right hand column on page 2 which teaches various fillers (SiO_2 , ZrO_2 , Al_2O_3 , TiO_2). While it is unclear from the Japanese reference what amount of filler and/or solvent is used, note that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. does not require undue experimentation). Thus, adjusting the amount of solvent in the final coating composition and the amount of filler would have been within routine experimentation and the skilled artisan would have found the claimed amounts to have been obvious.

For claims 4 and 6, please see (A-II) used in the working examples. For claims 16 and 17, note that the abstract teaches polystyrene resin substrates.

6. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

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dependent form, or rewrite the claim(s) in independent form. This claim limitation is already found in claim 3, as now amended.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

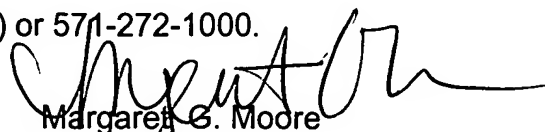
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
9/4/06